



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C3-3-4

Job Sheet 183603



Part No: C3-3-4

Job Qty: 40 ea

Part Name: Link Pin



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/21/18

Job Tracking No:

Due Date: 10/12/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG C3-3-4 Rev 1A IPP Rev A 18.04.06 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	40 Ea		10/12/18	0.00	0.00	Start Up Machining-3		M.P. 12/10/18
110	Mori Seiki	40 pcs		10/12/18	0.00	2.67	MORI SL-154		M.P. 12/10/18
120	QC	40 pcs		10/12/18	0.00	0.00	QC2 Machining-4		M.P. 12/10/18
130	QC	40 pcs		10/12/18	0.00	0.00	QC8 Machining-4		M.P. 12/10/18
135	Outsource	40 pcs		10/12/18			MEI001-VC	10	
140	Outsource	40 pcs		10/12/18			GRO002-VC	10	
150	Packaging	40 pcs		10/12/18	0.00	0.00	Packaging2		NOV 02 2018
160	QC	40 pcs		10/12/18	0.00	0.00	QC6		38
210	Packaging	40 pcs		10/12/18	0.00	0.00	Packaging3-1		9-89
220	QC21-SA	40 Ea		10/12/18	0.00	0.00	QC21		NOV 15 2018

Part Op 110 - 1-Machine as per folio FC049 FOLIO REV: _____ DWG REV: _____ 2-Deburr
Descriptions: 135 - 1--Issue P/O to Atlantic Heat Treat; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic Heat Treat to ship directly to Groupe Altech***
140 - -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-O1-R0.125	Tool Steel Round Bar 0.125 dia.	2.3000 ft (.0575 ea)	90-Start up Operation	5060422

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-O1-R0.125	2	9	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

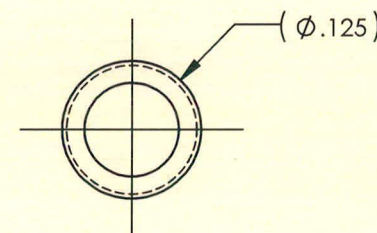
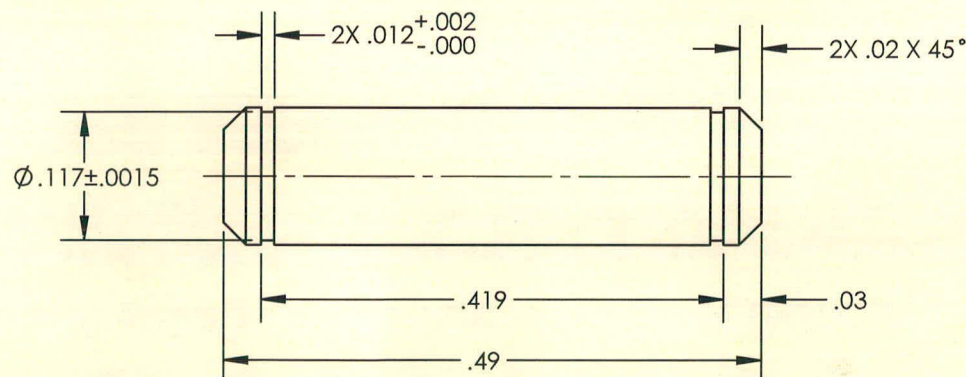
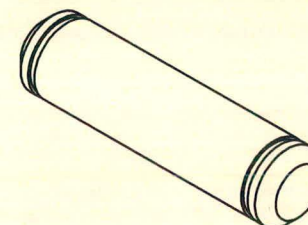
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER :			

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D MATERIAL FROM 01 TO DRILL ROD.	8/17/2012	JAG	
1A	14-0111	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. CH'D DIMENSION WAS .487 IS .49, WAS .034 IS .03.	8/6/2014	DJN	RW



- NOTE:
1. BAG & LABEL WITH BATCH NUMBER.
 2. NICKEL PLATE .0004-.0006 BAKE AFTER PLATING.

DART AEROSPACE	
TITLE LINK PIN	
DWG NO. C3-3-4	REV 1A
MAT'L DRILL ROD	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT RC 53-56
.XX ± .01	FINISH SEE NOTE 2
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 6:1	DATE 11/8/2001
SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			C3-3-4	1	LINK PIN	DRILL ROD	Ø1/8 X 5/8	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S118503



Part: C3-3-4

Job No: 183603

Serial No/Batch: S118503

Revision: 1A

Inspector:

Exp Date:

Instructions:

Date: 10/15/18



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041370**

Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S R14 Canada
Phone: 866 257 6395

PO No: PO041370

PO Date: 10/18/18

Due Date: 10/29/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Hemmerich, Steven
Phone: 613-632-5200 Ext: 281
shemmerich@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Pynt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	182811	RB AN8514- 1-7	Arm, Adjustable Spanner Wrench 1-Issue P/O to ATLANTIC HEAT TREAT; P/O _____ RC 22-32 2-Bead blast 3-Black oxide finish, MIL- C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF- 16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL- PRF-81309 and wipe off excess. -Certificate of Conformity is required	Firmed	-	10/29/18	8 pcs	0 pcs	8 pcs	\$25.00/pcs	\$200.00

8 X

OCT 29 2018

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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO041370

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	183752	RB AN8514-1-7	Arm, Adjustable Spanner Wrench 1-Issue P/O to ATLANTIC HEAT TREAT; P/O _____ RC 22-32 2-Bead blast 3-Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Certificate of Conformity is required	Firmed	-	10/29/18	11 pcs	0 pcs	11 pcs	\$18.181818/pcs	\$200.00
3	183603	C3-3-4	Link Pin 1-Issue P/O to Atlantic Heat Treat; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Atlantic Heat Treat to ship directly to Groupe Altech***	Firmed	-	10/29/18	40 pcs	0 pcs	40 pcs	\$2.0625/pcs	\$82.50
4	183750	RB AN8514-1-5	Arm, Adjustable Spanner Wrench 1-Issue P/O to ATLANTIC HEAT TREAT ; P/O _____ RC 22-32 2-Bead blast 3-Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Certificate of Conformity is required	Firmed	-	10/29/18	10 pcs	0 pcs	10 pcs	\$20.00/pcs	\$200.00

OCT 29 2018

40 X OCT 31 2018

10 X OCT 29 2018

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041370**

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	183749	RB AN8514-1-4	Arm, Adjustable Spanner Wrench 1-Issue P/O to ATLANTIC HEAT TREAT P/O _____ RC 22-32 2-Bead blast 3-Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Certificate of Conformity is required	Firmed	-	10/29/18	7 pcs	0 pcs	7 pcs	\$28.571428/pcs	\$200.00
							7X	OCT 29 2018			
6	183200	C2-3-3	Latch Roller 1-Issue P/O to Atlantic Heat Treat; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required	Firmed	-	10/29/18	54 pcs	0 pcs	54 pcs	\$1.527777/pcs	\$82.50
							54X	OCT 29 2018			

Grand Total: \$965.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/29/18 8:12 AM dart.tsimiklis.chrisoula

Shipping Ticket

Sold To:

1448

DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Ship To:

156804

DART AEROSPACE LTD.
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

Page 1 of 1

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
PO041370				

Quantity	Part No. / Part Name / Part Description	Pounds
40	PCS MATERIAL 0-1 SAND BLAST & HEAT TREAT TO 53-56RC C OF C, PRT# C3-3-4, JOB# 183603	

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

Shipped Complete

Quantity Shipped:

40

Pounds Shipped:

1.00

Order No.: 159675

Shipped Complete

Quantity Shipped:

40.00

Received By:

Date:

Pounds Shipped:

1.00

Sold To: DART AEROSPACE LTD.

Shipped ON: 10/24/2018

Certification

Date: 10/24/2018

Entry Date: 10/24/2018

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: PO041370 ✓

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 01

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
40	40 PCS MATERIAL 0-1 SAND BLAST & HEAT TREAT TO 53-56RC C OF C, PRT# C3-3-4, JOB# 183603 ✓	1

Insp. Type	Scale	Minimum	Maximum	Number	Other
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Customer Requirements:

Harden rockwell

Results:

Harden ROCKWE 53. 56. 53. TESTED AS PER SAMPLING PLAN

HEAT TREATED TO 53 RC AS PER CUSTOMER REQUEST

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY). ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER, IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in loading or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.


KEAN SHEPHERD
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041473

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041473
PO Date: 10/25/18
Due Date: 10/31/18
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	183603	C3-3-4	Link Pin -Issue P/O to Groupe Altech: P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed	-	10/31/18	40 pcs	0 pcs	40 pcs	\$6.00/pcs	\$240.00

40 x NOV 02 2018

Grand Total: \$240.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CS
TB

Plex 10/26/18 1:09 PM dart.tsimiklis.chrisoula

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Certificat de Conformité / Certificate of Compliance

(013875-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

013875- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
02-Nov-2018		Aman		041473				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C3-3-4 Rev.	C3-3-4 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	40	40	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

